

General

Title

Use of spirometry testing in the assessment and diagnosis of COPD: percentage of patients 40 years of age and older with a new diagnosis of COPD or newly active COPD who received appropriate spirometry testing to confirm the diagnosis.

Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2015 technical specifications for ACO measurement. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients 40 years of age and older during the measurement year with a new diagnosis of or newly active chronic obstructive pulmonary disease (COPD) who received appropriate spirometry testing to confirm the diagnosis.

Note from the National Quality Measures Clearinghouse (NQMC): For this measure, there are both Electronic and Hybrid Specifications. This NQMC measure summary is based on the Electronic specification. Refer to the original measure documentation for details pertaining to the Hybrid specification.

Rationale

Chronic obstructive pulmonary disease (COPD) is a major cause of chronic morbidity and mortality throughout the world and in the United States (U.S.). COPD defines a group of diseases characterized by airflow obstruction, and includes chronic bronchitis and emphysema (Mannino et al., 2002). Symptoms of COPD range from chronic cough and sputum production to severe, disabling shortness of breath, leading

to significant impairment of quality of life. COPD afflicts nearly 16 million adults in the U.S. COPD is the fourth leading cause of death in the U.S., and is projected to move to third place by 2020 (Snow et al., 2001; National Heart, Lung, and Blood Institute [NHLBI], 2001).

Spirometry is a simple test that measures the amount of air a person can breathe out and the amount of time it takes to do so (NHLBI & World Health Organization [WHO], 2004). Both symptomatic and asymptomatic patients suspected of COPD should have spirometry performed to establish airway limitation and severity (Sutherland & Cherniack, 2004). Though several scientific guidelines and specialty societies (American Thoracic Society, 1994; NHLBI & WHO, 2004; Institute for Clinical Systems [ICSI], 2003; Veterans Administration/Department of Defense [VA/DoD], 2001) recommend use of spirometry testing to confirm COPD diagnosis and determine severity of airflow limitation, spirometry tests are largely underutilized.

Evidence for Rationale

American Thoracic Society. Standardization of spirometry. [internet]. 1994.

Institute for Clinical Systems Improvement (ICSI). Health care guideline: chronic obstructive pulmonary disease. [internet]. 2003 Dec [accessed 2004 Sep 01].

Mannino DM, Homa DM, Akinbami LJ, Ford ES, Redd SC. Chronic obstructive pulmonary disease surveillance--United States, 1971-2000. MMWR Surveill Summ. 2002 Aug 2;51(6):1-16. [PubMed](#)

National Committee for Quality Assurance (NCQA). HEDIS 2015: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

National Heart, Lung, and Blood Institute, World Health Organization. Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease: Global Initiative for Chronic Obstructive Lung Disease (GOLD). Executive summary. [internet]. 2004 [accessed 2004 Sep 01].

National Heart, Lung, and Blood Institute. Data fact sheet: chronic obstructive pulmonary disease (COPD). 2001 May.

Snow V, Lascher S, Mottur-Pilson C, Joint Expert Panel on COPD of the American College of Chest Physicians [trunc]. The evidence base for management of acute exacerbations of COPD: clinical practice guideline, part 1. Chest. 2001 Apr;119(4):1185-9. [PubMed](#)

Sutherland ER, Cherniack RM. Management of chronic obstructive pulmonary disease. N Engl J Med. 2004 Jun 24;350(26):2689-97. [65 references] [PubMed](#)

Veterans Administration/Department of Defense (VA/DoD). Clinical practice guideline for the management of chronic obstructive pulmonary disease (COPD). Guideline summary. [internet]. [accessed 2001 Oct 01].

Primary Health Components

Chronic obstructive pulmonary disease (COPD); emphysema; chronic bronchitis; spirometry testing

Denominator Description

Patients age 42 years or older as of December 31 of the measurement year, with a Negative Diagnosis History, who had a diagnosis of chronic obstructive pulmonary disease (COPD) during the Intake Period (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

At least one claim/encounter for spirometry during the 730 days (2 years) prior to the Index Episode Start Date (IESD) through 180 days (6 months) after the IESD (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

All HEDIS measures undergo systematic assessment of face validity with review by measurement advisory panels, expert panels, a formal public comment process and approval by the National Committee for Quality Assurance's (NCQA) Committee on Performance Measurement and Board of Directors. Once NCQA establishes national benchmarks for accountable care organization (ACO) performance, all measures will undergo formal reliability testing of the performance measure score using beta-binomial statistical analysis. Where applicable, measures also are assessed for construct validity using the Pearson correlation test.

Evidence for Extent of Measure Testing

Rehm B. (Assistant Vice President, Performance Measurement, National Committee for Quality Assurance, Washington, DC). Personal communication. 2015 Apr 8. 1 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Accountable Care Organizations

Ambulatory/Office-based Care

Emergency Department

Hospital Inpatient

Hospital Outpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Multisite Health Care or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Specified

Target Population Age

Age greater than or equal to 40 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

A 12-month window that begins on July 1 of the year prior to the measurement year and ends on June 30 of the measurement year

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Institutionalization

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Patients age 42 years or older as of December 31 of the measurement year, with a Negative Diagnosis History, who had an outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set), an emergency department (ED) visit (ED Value Set) or an acute inpatient encounter (Acute Inpatient Value Set), during the Intake Period, with any diagnosis of chronic obstructive pulmonary disease (COPD) (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set). If the patient had more than one eligible visit, include only the first visit.

Note:

Intake Period: A 12-month window that begins on July 1 of the year prior to the measurement year and ends on June 30 of the measurement year. The Intake Period captures the first COPD diagnosis.

Negative Diagnosis History: A period of 730 days (2 years) prior to the Index Episode Start Date (IESD) (inclusive), during which the

patient had no visits containing any diagnosis of COPD. For an acute inpatient IESD, use the date of admission to determine the Negative Diagnosis History.

IESD: The earliest date of service for any eligible visit (outpatient, ED or acute inpatient) during the Intake Period with any diagnosis of COPD.

For an outpatient visit, the IESD is the date of service.

For an acute inpatient visit, the IESD is the date of discharge.

For a transfer or readmission, the IESD is the discharge date of the original admission.

Refer to the original measure documentation for steps to identify the eligible population.

Exclusions

Test for Negative Diagnosis History. Exclude patients who had an outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set), an ED visit (ED Value Set) or an acute inpatient encounter (Acute Inpatient Value Set) during the 730 days (2 years) prior to the IESD, with diagnosis of COPD (COPD Value Set), emphysema (Emphysema Value Set) or chronic bronchitis (Chronic Bronchitis Value Set).

Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the [NCQA Web site](#) to purchase *HEDIS 2015 Technical Specifications for ACO Measurement*, which includes the Value Set Directory.

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

At least one claim/encounter for spirometry (Spirometry Value Set) during the 730 days (2 years) prior to the Index Episode Start Date (IESD) through 180 days (6 months) after the IESD

Note: **IESD:** The earliest date of service for any eligible visit (outpatient, ED or acute inpatient) during the Intake Period with any diagnosis of chronic obstructive pulmonary disease (COPD).

For an outpatient visit, the IESD is the date of service.

For an acute inpatient visit, the IESD is the date of discharge.

For a transfer or readmission, the IESD is the discharge date of the original admission.

Exclusions

Unspecified

Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the [NCQA Web site](#) to purchase *HEDIS 2015 Technical Specifications for ACO Measurement*, which includes the Value Set Directory.

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Electronic health/medical record

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Description of Allowance for Patient or Population Factors

The Accountable Care Organization (ACO) aggregate population is reported as a whole, with an option to report Medicaid separately for measures for which HEDIS Health Plan Measurement offers Medicaid specifications.

Standard of Comparison

not defined yet

Identifying Information

Original Title

Use of spirometry testing in the assessment and diagnosis of COPD (ASPR).

Measure Collection Name

HEDIS 2015: Accountable Care Organization (ACO) Collection

Measure Set Name

Effectiveness of Care

Measure Subset Name

Respiratory Conditions

Submitter

National Committee for Quality Assurance - Health Care Accreditation Organization

Developer

National Committee for Quality Assurance - Health Care Accreditation Organization

Funding Source(s)

Unspecified

Composition of the Group that Developed the Measure

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

Financial Disclosures/Other Potential Conflicts of Interest

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

Endorser

National Quality Forum - None

NQF Number

not defined yet

Date of Endorsement

2014 Dec 23

Adaptation

This measure was adapted from the *HEDIS Technical Specifications for Health Plans* ("*HEDIS Health Plan*

Measurement") and *HEDIS Physician Measurement*.

Date of Most Current Version in NQMC

2014 Nov

Measure Maintenance

Annual

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS 2013 Technical Specifications for ACO Measurement. Washington (DC): National Committee for Quality Assurance (NCQA); 2012. various p.

The measure developer reaffirmed the currency of this measure in November 2015.

Measure Availability

Source available for purchase from the [National Committee for Quality Measurement \(NCQA\) Web site](#)

.

For more information, contact NCQA at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org .

NQMC Status

This NQMC summary was completed by ECRI Institute on May 13, 2014.

This NQMC summary was updated by ECRI Institute on February 11, 2015.

The information was reaffirmed by the measure developer on November 2, 2015.

Copyright Statement

This NQMC summary is based on the original measure, which is subject to the measure developer's copyright restrictions.

Content adapted and reproduced with permission from the National Committee for Quality Assurance (NCQA). HEDIS® is a registered trademark of NCQA. HEDIS measures and specifications were developed by and are owned and copyrighted by NCQA. HEDIS measures and specifications are not clinical guidelines and do not establish a standard of medical care. NCQA makes no representations, warranties, or endorsement about the quality of any organization or physician that uses or reports performance measures and NCQA has no liability to anyone who relies on such measures or specifications. Limited proprietary coding is contained in the measure specifications for convenience. Users of the proprietary

code sets should obtain all necessary licenses from the owners of these code sets. NCQA disclaims all liability for use or accuracy of any coding contained in the specifications.

Anyone desiring to use or reproduce the measure abstracts without modification for a non-commercial purpose may do so without obtaining any approval from NCQA. All commercial uses of the measure abstracts must be approved by NCQA and are subject to a license at the discretion of NCQA. To purchase copies of the full measures and specifications, which contain additional distribution and use restrictions, contact NCQA Customer Support at 888-275-7585 or visit www.ncqa.org/publications

Production

Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2015 technical specifications for ACO measurement. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

Disclaimer

NQMC Disclaimer

The National Quality Measures Clearinghouse[®] (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the [NQMC Inclusion Criteria](#).

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. Moreover, the views and opinions of developers or authors of measures represented on this site do not necessarily state or reflect those of NQMC, AHRQ, or its contractor, ECRI Institute, and inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.